



Department of Natural Resources and Parks
Solid Waste Division
King Street Center, Suite 701
201 South Jackson Street
Seattle, Washington 98104-3855
www.metrokc.gov/dnpr/swd

Mitigated Determination of Non-Significance (MDNS)

Name of Proposal: Bio Energy (Washington), LLC - Landfill Gas to Energy Project
(Project # AO7P0324) Cedar Hills Gas Processing Plant

Description of Proposal: Bio Energy (Washington), LLC proposes to build a facility at the Cedar Hills Regional Landfill site designed to convert landfill gas generated by the Landfill into pipeline quality methane gas. The facility is planned to process up to 11,000 cubic feet per minute (cfm) of landfill gas containing about 46% methane (CH₄) by volume. Currently, all the landfill gas produced at the site is treated by combustion using five (5) existing landfill gas flares.

The gas processing Plant ("facility") is designed to pass the collected landfill gas through several stages of compression to separate out methane gas and to remove other constituents like carbon dioxide, moisture, sulfur compounds, nitrogen, oxygen, non-methane organic compounds (NMOC), and other trace gases. The design basis for the facility is to produce about 4,000 cfm of gas for pipeline distribution containing about 97% methane and 3% nitrogen. The process will produce a side stream of gases composed of about 39% methane, 55% nitrogen and 6% carbon dioxide that will be used for producing electric power for providing supplementary power supply to the facility. Another stream of gas composed of volatile organic compounds, trace gases, carbon-dioxide, and low concentration of methane (<10%) will be burned using a thermal oxidizer and a secondary open flare. The secondary flare unit also handles gas streams during start up, shut down, and for emergency situations. During longer periods of shut down of the facility, generated landfill gas will be diverted to the Cedar Hills Regional Landfill's flare station for treatment by combustion.

Location of Proposal: The project is located at the Cedar Hills Regional Landfill Facility at 16645 228th Avenue SE, Maple Valley, Washington 98038 (at the intersection of 228th Avenue SE and Cedar Grove Road). The proposed facility will be located within the Cedar Hills Regional Landfill site occupying about 2.0 acres of land near the front end of the Landfill site. The Landfill site lies to the North ½ of the Section 28, Township 23, Range 6 and Section 21, Township 23, Range 6, except the Northeast ¼ thereof. There is a 1000-foot buffer strip along the adjoining property.

Proponent and Lead Agency: Solid Waste Division, Department of Natural Resources and Parks, King County

The Lead Agency for this proposal has determined that it does have a probable minor to moderate adverse impact on the environment if no mitigation measures are taken. The Lead Agency has determined that if the listed mitigation measures are taken, there will be no probable significant adverse impacts on the environment. The recommended mitigation measures are described in Table 1. The Lead Agency also determined that an environmental impact statement (EIS) is not required under RCW 43.21C.030 (2) (c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

Table 1: Mitigation Measures Required and Procedure for Mitigations Enforcement

Sources of Pollutions	Impacted Area	Mitigation Plan Required	Procedure to be Followed
Gaseous Emissions from Thermal Oxidizer and Flare	Air and population surrounding the site	Mitigation plan for air emissions control based on Best Available Control Technology (BACT) and monitoring program. Mitigation plan must comply with Puget Sound Clean Air Agency (PSCAA) regulation requirements and (WAC 173-400).	Air permit to be obtained from PSCAA before commencing the construction work.
Liquid waste discharged from the compressor, engine generators, moisture removal system and other process components.	Surface run-off and/or groundwater	Mitigation plan for liquid waste discharge control based on BACT and monitoring program. Mitigation must comply with WAC 173-221A	Liquid waste discharge control plan to be processed along with the building permit to be obtained from DDES before commencing the construction work.
Noise from the compressors and power generators	Air and population surrounding the site	Mitigation plan for noise emissions control based on BACT and monitoring program. Mitigation must comply with WAC 173-60	Noise mitigation plan to be processed along with the building permit to be obtained from DDES before commencing the construction work.
Fire, gaseous emission, and liquid discharge due to explosion, break-down, leakage, and hazards.	Air, water, soil, and surrounding populations	Emergency response plan, spill prevention control and countermeasures (SPCC) plan (WAC 173-180), and Health and Safety Plan.	Emergency response plan, spill prevention control and countermeasures (SPCC) plan, Health and Safety Plan, must be submitted to and approved by DDES before commencing the construction work.

This MDNS is issued under WAC 197-11-350 Sections (1) and (7); the lead agency will not act on this proposal for fourteen (14) days from the date below.

Responsible Official:

Kevin E. Kiernan, P.E.

Position/Title:

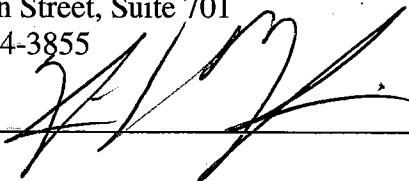
Division Director of the Solid Waste Division of the
King County Department of Natural Resources and
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DATE: 03-28-08

SIGNATURE: _____



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**This material is available in alternate formats upon request to
Mizanur Rahman.**